DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
WASHINGTON, DC 20361-0001

IN REPLY REFER TO

NAVAIRINST 5230.11
AIR-411
8 Feb 89

NAVAIR INSTRUCTION 5230.11

From: Commander, Naval Air Systems Command

Subj: FLEET AVIATION LOGISTICS INFORMATION SYSTEMS FUNCTIONAL MANAGEMENT MANUAL

Ref:
(a) SECNAVINST 5230.10, Department of the Navy (DON) Strategic Plan for Managing Information and Related Resources (IRSTRATPLAN)
(b) SPAWARINST 5230.5, Project Control Procedures for Fleet Information Systems
(c) OPNAVINST 4790.2D, Naval Aviation Maintenance Program (NAMP), Volumes I-V
(d) SPAWARINST 4130.12, Configuration Management of Shipboard Non-tactical Automated Data Processing Program (SNAP) AN/UYK-62 and AN/UYK-65 Systems
(e) SECNAVINST 5230.9A, Information Resources (IR) Program Planning
(f) SECNAVINST 5231.1B, Life Cycle Management (LCM) Policy and Approval Requirements for Information System (IS) Projects
(g) SECNAVINST 5232.1, Quality Assurance (QA) Program for Information Systems (IS) Projects
(h) Naval Aviation Logistics Command Management Information System (NALCOMIS) Life Cycle Configuration Management Plan (CMP) Doc. #41L001 CMP-01 of 3 May 82
(i) NAVAIRINST 4130.1B, Naval Air Systems Command Configuration Management Manual

1. Purpose

a. Establish policies and procedures and assign responsibilities, within the Naval Air Systems Command (NAVAIR), for the functional management of fleet Naval Aviation Maintenance Program (NAMP) information systems (IS's) in support of the aviation logistics information Functional Sponsor Plan (FSP) published by reference (a).

b. Clarify reference (b) with respect to program management and fleet NAMP IS responsibilities and procedures.

2. Scope. This manual applies to all fleet non-tactical IS requirements for automation of NAMP functions that require more than general purpose software on a single microcomputer. Fleet units are organizational and intermediate level maintenance activities and their supporting functional and type wings as defined by reference (c).

3. Background

a. Reference (a) establishes Navy policy and responsibilities for aviation logistics IS's. The Chief of Naval Operations (CNO (OP-51)) is the functional

sponsor. References (a) and (b) assign functional manager (FM) responsibilities for aviation logistics to the Naval Air Systems Command Headquarters (NAVAIRHQ). Specifically, NAVAIRHQ Logistics and Maintenance Policy Division (AIR-411) is designated as the FM for all fleet aviation logistics systems including the Aviation Maintenance and Material Management (AV-3M) system, all phases of the Naval Aviation Logistics Command Management Information System (NALCOMIS) upon Milestone III approval, any stand-alone aviation logistics IS which could be incorporated with or integrated into NALCOMIS, and any functional enhancements to NALCOMIS.

b. The NALCOMIS program was established in 1974. NAVAIRHQ (PMA270) was chartered in 1977 as the program manager (PM) for its development, acquisition and implementation. NALCOMIS is the CNO designated standard program for the integration of all non-tactical fleet automation requirements in support of the NAMP. It will provide an integrated management information system (MIS) at the organizational/intermediate level, a standard system for non-tactical data collection and the foundation on which to build a compatible integrated data base at the system level.

c. NALCOMIS Phase I, NALCOMIS Repairables Management Module (NRMM), is authorized for fleet implementation. NALCOMIS Phase II (Intermediate Maintenance Activity (IMA)/Supply Support Center (SSC)) and Phase III (Organizational Maintenance Activity (OMA)) are authorized for full scale development and prototype testing of approved functional baselines. Phase II began fleet implementation in fiscal year (FY) 1987. This manual establishes the responsibilities and procedures for the continued integration of local management information needs into NALCOMIS.

4. Policy

a. NALCOMIS is the primary system for collecting and reporting all fleet aviation logistics data, as approved by the NAMP policy committee per reference (c).

b. All upline systems requiring data from the fleet should obtain it through interface with NALCOMIS or the AV-3M central data base or Naval Aviation Logistics Data Analysis (NALDA) System.

c. All proposed new functional requirements for automation within NALCOMIS must be approved by appropriate NAMP policy, and, if project scope is affected, Automated Data Processing (ADP) approval authorities prior to commencement of software definition, design and development. Proposed new functional requirements will be processed through the NALCOMIS Configuration Control Board (CCB). The CCB will submit those new functional requirements recommended for development to the NAMP policy committee, established by reference (c), for subsequent submittal to CNO (OP-51) for approval.

d. Per reference (b), the Navy Management Systems Support Office (NAVMASSO) is the Central Design Activity (CDA) for NALCOMIS. All approved software changes/enhancements to the NALCOMIS operational baseline will be designed, developed, implemented and maintained through NAVMASSO.

e. All NALCOMIS changes/enhancements that impact baseline hardware configuration or interface with other Shipboard Non-Tactical ADP Program (SNAP)

applications will be coordinated with the SNAP office, Space and Naval Warfare Systems Command (SPAWAR (PMW-164)) utilizing the SNAP Hardware Control Committee (HCC) and Joint Configuration Control Board (JCCB), as appropriate. Reference (d) provides additional guidance on SNAP Configuration Management (CM).

5. Procedures

a. All new functional requirements for fleet NAMP automation will be submitted to the FM, NAVAIRHQ (AIR-411), via the configuration control process addressed in this manual.

b. The FM will consolidate requirements and prepare required changes for the information resources (IR) planning process, per reference (e), as required.

c. The FM will prepare functional system documentation for new requirements (functional description (FD)), per reference (f), and forward to NAVMASSO via the PM.

d. Per reference (b), NAVMASSO will assess the impact of the new requirements (including hardware architecture) and advise the FM and PM accordingly.

e. The NALCOMIS CCB will review, prioritize and make recommendations to the NAMP policy committee for NALCOMIS functional enhancements. It is recognized that formal NAMP manual change documentation sometimes cannot be prepared until completion of software design/development. Therefore, it is essential that up-front NAMP policy approval be obtained for functional enhancements during the concept phase.

f. The PM will execute development priorities of the CCB, as approved by CNO (OP-51), and provide funding to NAVMASSO consistent with available resources provided by the resource sponsor.

g. Upon completion of software design, NAVMASSO will provide formal NAMP change documentation to the Naval Aviation Maintenance Office (NAVAVNMAINTOFF) per reference (c), when required.

h. The FM will certify new software for fleet implementation upon successful completion of the operational and system performance test (SPT) per reference (g).

i. The FM will submit new hardware requirements to the SNAP JCCB through the NALCOMIS PM.

j. Detailed guidance on the FM's role and the execution of that role are provided in this manual and in references (h) and (i). Figures 1 through 5 of this manual illustrate the future plan for IS's consolidation/interface and provide processing procedures for configuration management items. The procedures for coordination/initiation of new IS's, software change proppsals, and software trouble reports are outlined in appendix A. Appendix B provides the interim phase IS architecture, with candidate NALCOMIS IS interfaces and tentative

consolidations of systems. Appendix C, Definitions, is provided as a reference tool when using this manual.

6. Action. This manual applies to all NAVAIRHQ directorates and field activities and is effective immediately.

J. B. WILKINSON

Distribution: FKA1A (established quantity); others 2 copies
SNDL: 23C3; 24A1; 24A2; 42RR; A3; A6; FKA1B; FKQ8; FKR7F; FT2

Copy to: (2 copies each unless otherwise indicated)
SNDL: C84B (Morgantown (1 copy); FKA1A (AIR-07D) A/L (1 copy), AIR-71232 (10 copies), AIR-71233B (40 copies), AIR-713, AIR-102, PMA270, AIR-04A, AIR-04B, AIR-41, AIR-41142 (5 copies), FKM27 (NPPSO-NDW C/L)

Stocked: Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120-5099

NAVAIRINST 5230.11
8 Feb 89

FLEET AVIATION LOGISTICS INFORMATION SYSTEMS

FUNCTIONAL MANAGEMENT MANUAL

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

A	ACC	Aircraft Controlling Custodian
	ADM	Administrative Data Management System
	ADMIN	Administrative
	ADP	Automated Data Processing
	ADPE	Automatic Data Processing Equipment
	AEMS	Aircraft Engine Management System
	AI	Artificial Intelligence
	AIS	Automated Information System
	AMEN	Aviation Maintenance Engineering
	AMMRL	Aircraft Maintenance Material Readiness List
	AMPAS	Analytical Maintenance Program Analysis Support
	APMM	AIMD Production Management Module
	APMS	AIMD Performance Management System
	ASDP	Abbreviated System Decision Paper
	ASKARS	Automated Storage, Kitting and Retrieval System
	ASN	Assistant Secretary of the Navy
	ASSET MGMT	Asset Management
	ASSTSECNAV FM	Assistant Secretary of the Navy for Financial Management
	ATRIMS	Aviation Training and Readiness Information Management System
	ATSS	Aviation Training Support System
	AUDGEN	Auditor General of the Navy
	AUTOLOG	Automated Logbook
	AV-3M	Aviation Maintenance and Material Management
	AWARS	Airborne Weapons and Reporting System
B	BASIS	Bases and Stations Information System
C	CAIMS	Conventional Ammunition Integrated Management System
	CAMS	Comprehensive Asset Management System
	CASS	Consolidated Automated Support System
	CCB	Configuration Control Board
	CDA	Central Design Activity
	CG3MS	Computer Generated 3M System
	CIMP	Component Information Management Plan
	CINCLANTFLT	Commander-in-Chief, Atlantic Fleet
	CINCPACFLT	Commander-in-Chief, Pacific Fleet
	CINCUSNAVEUR	Commander-in-Chief, US Naval Forces, Europe
	CM	Configuration Management
	CMC	Commandant of the Marine Corps
	CMP	Configuration Management Plan
	CNAL	Commander Naval Air Force Atlantic
	CNAP	Commander Naval Air Force Pacific
	CNATRA	Chief of Naval Air Training
	CNET	Chief of Naval Education and Training
	CNO	Chief of Naval Operations
	CNR	Chief of Naval Reserve
	COMTRAK	Component Tracking System
	CONF STAT ACCT	Configuration Status Accounting
	CONFIG	Configuration

	DON	Department of the Navy
E	ECAMS	Enhanced Comprehensive Asset Management System
	ECP	Engineering Change Proposal
	EMS	Engine Monitoring System
F	FAMMS	Fixed Allowance Management and Monitoring System
	FD	Functional Description
	FIRMS	Flight Incidence Recording and Monitoring System
	FLIGHT ACT	Flight Activity
	FM	Functional Manager
	FMFLANT	Fleet Marine Force, Atlantic
	FMFPAC	Fleet Marine Force, Pacific
	FOJ	Fleet Originated Jobs Database
	FREDS	Flight Readiness Evaluation Data System
	FSP	Functional Sponsor Plan
H	HCC	Hardware Control Committee
I	IFARS	Individual Flight Activity Reporting System
	IMA	Intermediate Maintenance Activity
	IR	Information Resource
	IRSTRATPLAN	Strategic Plan for Managing Information and Related Resources
	IS	Information System
J	JCCB	Joint Configuration Control Board
L	LAMS	Local Asset Management System
	LCM	Life Cycle Management
	LOCAL/UPLINE REP	Local Upline Reporting
M	MAINT ACT	Maintenance Activity
	MAT RQMT PROC	Material Requirement Processing
	MCRC	Master Component Rework Capability
	MEASURE	Metrology Automated System for Uniform Recall and Reporting
	MENS	Mission Element Needs Statement
	MIS	Management Information System
	MIS for INAS	MIS for Industrial Naval Air Stations
	MRMS	Mechanized Repairables Management System
	MSS	Mission Support System
N	NADIS	Naval Aviation Depot Information System
	NALCOMIS	Naval Aviation Logistics Command Management Information System
	NALDA	Naval Air Logistics Data Analysis
	NALIS	Naval Aviation Logistics Information System
	NAVAVNMAINTOFF	Naval Aviation Maintenance Office
	NAMP	Naval Aviation Maintenance Program
	NAVAIRHQ	Naval Air Systems Command Headquarters
	NAVAIRESFOR	Naval Air Reserve Forces
	NAVCOMPT	Comptroller of the Navy

	MARS	Management Action Reporting System
	MAT RQMT PROC	Material Requirement Processing
	MCRC	Master Component Rework Capability
	MEASURE	Metrology Automated System for Uniform Recall and Reporting
	MENS	Mission Element Needs Statement
	MGMT	Management
	MIS	Management Information System
	MIS for INAS	MIS for Industrial Naval Air Stations
	MRMS	Mechanized Repairables Management System
	MSS	Mission Support System
	MTIP	Maintenance Training Improvement Program
N	NADIS	Naval Aviation Depot Information System
	NALCOMIS	Naval Aviation Logistics Command Management Information System
	NALDA	Naval Aviation Logistics Data Analysis
	NALIS	Naval Aviation Logistics Information System
	NAMP	Naval Aviation Maintenance Program
	NAVAIRESFOR	Naval Air Reserve Forces
	NAVAIRHQ	Naval Air Systems Command Headquarters
	NAVAVNMAINTOFF	Naval Aviation Maintenance Office
	NAVCOMPT	Comptroller of the Navy
	NAVDAC	Naval Data Automation Command
	NAVFAC	Naval Facilities Engineering Command
	NAVFLIRS	Naval Flight Record Subsystem
	NAVMASSO	Navy Management Systems Support Office
	NAVRESFOR	Naval Reserve Forces
	NAVSEAHQ	Naval Sea Systems Command Headquarters
	NAVSUPHQ	Naval Supply Systems Command Headquarters
	NDS	NALCOMIS for Detachments Subsystem
	NIFMS	NAVAIR Industrial Financial Management System
	NIMMS	NAVAIR Industrial Material Management System
	NOMADS	Naval Off-Line Maintenance Administration Assistance System
	NRMM	NALCOMIS Repairables Management Module
	NTIPS	Navy Technical Information Presentation System
	NTP	Navy Training Plan
O	OCN	Originator Control Number
	OM	Operator's Manual
	OMA	Organizational Maintenance Activity
	OMMS	Organizational Maintenance Management System
	OSD	Office of the Secretary of Defense
P	PERS	Personnel
	PERS MGMT	Personnel Management
	PLTS	Parts Life Tracking System
	PM	Program Manager
	POA&M	Plan of Action and Milestones
	POC	Point of Contact
	POM	Program Objectives Memorandum
	PUBS	Publications

Q	QA	Quality Assurance
R	RCAS	Resource Configuration and Scheduling
	RD	Requirements Document
	REP	Report
	RIP	Readiness Improvement Program
	RT	Real Time
	RTSS	Reserve Training Support System
S	SAFCEN	Safety Center
	SAMS	Shipboard Aviation Management System
	SCP	Software Change Proposal
	SDP	System Decision Paper
	SDS	Source Data System
	SE	Support Equipment
	SERMIS	Support Equipment Resources Management Information System
	SESS	Support Equipment Standardization System
	SFM	Supply and Financial Management
	SIDMS	Status, Inventory, Data Management System
	SNAP	Shipboard Nontactical ADP Program
	SP	Stock Point
	SPAR	Stock Point ADP Replacement
	SPAWARHQ	Space and Naval Warfare Systems Command Headquarters
	SPORT	Specialized Program for Oceana Repairables Tracking
	SPT	System Performance Test
	SRC	Scheduled Removal Component
	SSC	Supply Support Center
	STR	Software Trouble Report
	SUADPS	Shipboard Uniform Automated Data Processing System
	SYS SUPPORT	Systems Support
T	TDSA	Technical Directive Status Accounting
	TECH PUB	Technical Publication
	TEL	Telephone Number
	THAIS	TYCOM Headquarters Automated Information System
	TICS	Tracking and Inventory Control System
	TIS	Training Integration System
	TR	Trouble Report
	TRAQS	Transaction Reporting/Asset Query System
	TYCOM	Type Commander
U	UADPS	Uniform Automated Data Processing System
	UIC	Unit Identification Code
	UM	User's Manual
	UNK	Unknown
V	VAMOSC	Visibility and Management of Operating and Support Costs
	VAMP	VAST Automated Management Program
	VAST	Versatile Avionics Shop Test
W	WCS	Workload Control System
	WUC-MS	Work Unit Code-Management System

U	UADPS	Uniform Automated Data Processing System
	UIC	Unit Identification Code
	UNK	Unknown
V	VAMOSC	Visibility and Management of Operating and Support Costs
	VAMP	VAST Automated Management Program
	VAST	Versatile Avionics Shop Test
W	WCS	Workload Control System
	WUC-MS	Work Unit Code-Management System

CHAPTER 1

INTRODUCTION

1.0 GENERAL. The NAVAIRHQ (AIR-411) has been assigned FM responsibilities per references (a) and (b) for all aviation logistics IS's including functional enhancements that are to be incorporated into NALCOMIS. This manual describes the FM role for fleet aviation logistics IS's and how NAVAIRHQ (AIR-411) will execute FM responsibilities relative to fleet aviation logistics IS's. It details associated functional management processes and organizations, describes the FM's relationship to program management and supports the aviation IS goals established by CNO (OP-05).

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CHAPTER 2

FUNCTIONAL ORGANIZATION

2.1 CNO. OP-05 (OP-51 and OP-52) is the functional sponsor and resource sponsor for NALCOMIS, future enhancements to NALCOMIS, and other aviation logistics MIS's.

2.2 NAVAIRHQ. PMA270 is the PM for NALCOMIS development/implementation, configuration manager for NALCOMIS, and the FM for NALCOMIS operational software until the baseline has been established. NAVAIRHQ (AIR-411) is the FM for NALCOMIS operational software once the baseline has been established, and FM for NALCOMIS enhancements and other aviation logistics IS's.

2.3 SPAWAR. The SNAP Office (SPAWAR PMW-164) is the PM for SNAP and chairperson of the SNAP JCCB's.

2.4 NAVMASSO. NAVMASSO has been assigned CDA responsibilities for fleet non-tactical IS's. NAVMASSO also functions as NALCOMIS configuration management administrator; chairperson of the NALCOMIS Change Review Board (CRB), established by reference (h); and manager of review office for fleet trouble reports (TR's). NAVMASSO is the change manager for all non-functional NAMP related software change proposals (SCP's) and software trouble reports (STR's) as addressed in appendix A.

2.5 NAVAVNMAINTOFF. NAVAVNMAINTOFF is designated the change manager for all NALCOMIS functional enhancements, major modifications and for all SCP's and STR's which impact the functional NAMP viewpoint. The NAVAVNMAINTOFF is a permanent member of the CRB and supports the CCB and FM in this capacity.

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CHAPTER 3

GOALS AND OBJECTIVES

3.1 General. This chapter briefly describes the goals and objectives of the aviation logistics IS's program. CNO (OP-51) has provided specific goals for aviation logistics IS's, directing consolidation of IR's wherever possible. This goal has been defined through the development of an aviation logistics FSP by CNO (OP-51) (see figure 1) to decrease the aviation logistics IS's incrementally from the current list of hundreds to three: NALCOMIS, for fleet data entry and information support; Naval Aviation Depot Information System (NADIS) for depot data collection and information support; and NALDA, for upline data analysis and information support. It is the FM's responsibility to execute this plan.

3.2 NALCOMIS. NALCOMIS is the primary IS for the collection and reporting upline of all aviation logistics data in the fleet. It will also provide IS support to local management for trending analyses, scheduled maintenance planning, supply requisitioning and status, decision support software and similar functions. NALCOMIS is comprised of nine general functional support modules as shown in appendix B, page B-2. The interim phase aviation logistics architecture (other IS's interfaces and tentative consolidations of systems) is also displayed in appendix B, pages B-3 and B-4; this architecture is subject to change as more information is gathered.

3.3 Overview of NALCOMIS Phased Releases. NALCOMIS software is being developed for release to the fleet in phases by the CDA, NAVMASSO. NAVAIRHQ (PMA270) is responsible for the development and implementation of the baseline software (phases I through III); NAVAIRHQ (AIR-411) is responsible for determination of proposed enhancements to the NALCOMIS baseline and consolidation of future IS requirements.

3.3.1 Phase I. This phase, known as NRMM, is being provided to selected fleet activities as an interim system until NALCOMIS development has been completed. NRMM is a slightly updated version of the U.S. Naval Air Force, Atlantic (CNAL) Status, Inventory, Data Management System (SIDMS) II software.

3.3.2 Phase II. This phase provides automation support to the IMA and SSC at Navy and Marine activities. Also included are interfaces with supply systems ashore and afloat.

3.3.3 Phase III. This phase will automate OMA's.

3.3.4 Future Enhancements. Functions to be automated as future enhancements will be coordinated by the FM and implemented according to fleet and CNO (OP-51) priorities.

3.4 NALCOMIS Interface with Other Systems. The interfaces currently envisioned between NALCOMIS and other systems are shown in appendix B. If approved as NALCOMIS enhancements, these interfaces will be developed and phased in as determined by priorities, available resources, and technology

evolution. Details for each system interface will be developed as required and defined by standard IS documentation. The CDA and other affected activities will be tasked/resourced for each approved interface enhancement; each will be a separate program at the CDA to facilitate tracking of milestones and costs. The currently envisioned interfaces may change as more data is gathered and technology improves.

3.5 Consolidation of IS Requirements. Consolidation of IS's requirements reduces costs to naval aviation and increases the efficiency of the data entry effort, management decisionmaking process and use of ADP resources. The previously stated goal of reducing the number of IS's in the fleet and consolidating information resources will be accomplished for fleet IS's as follows:

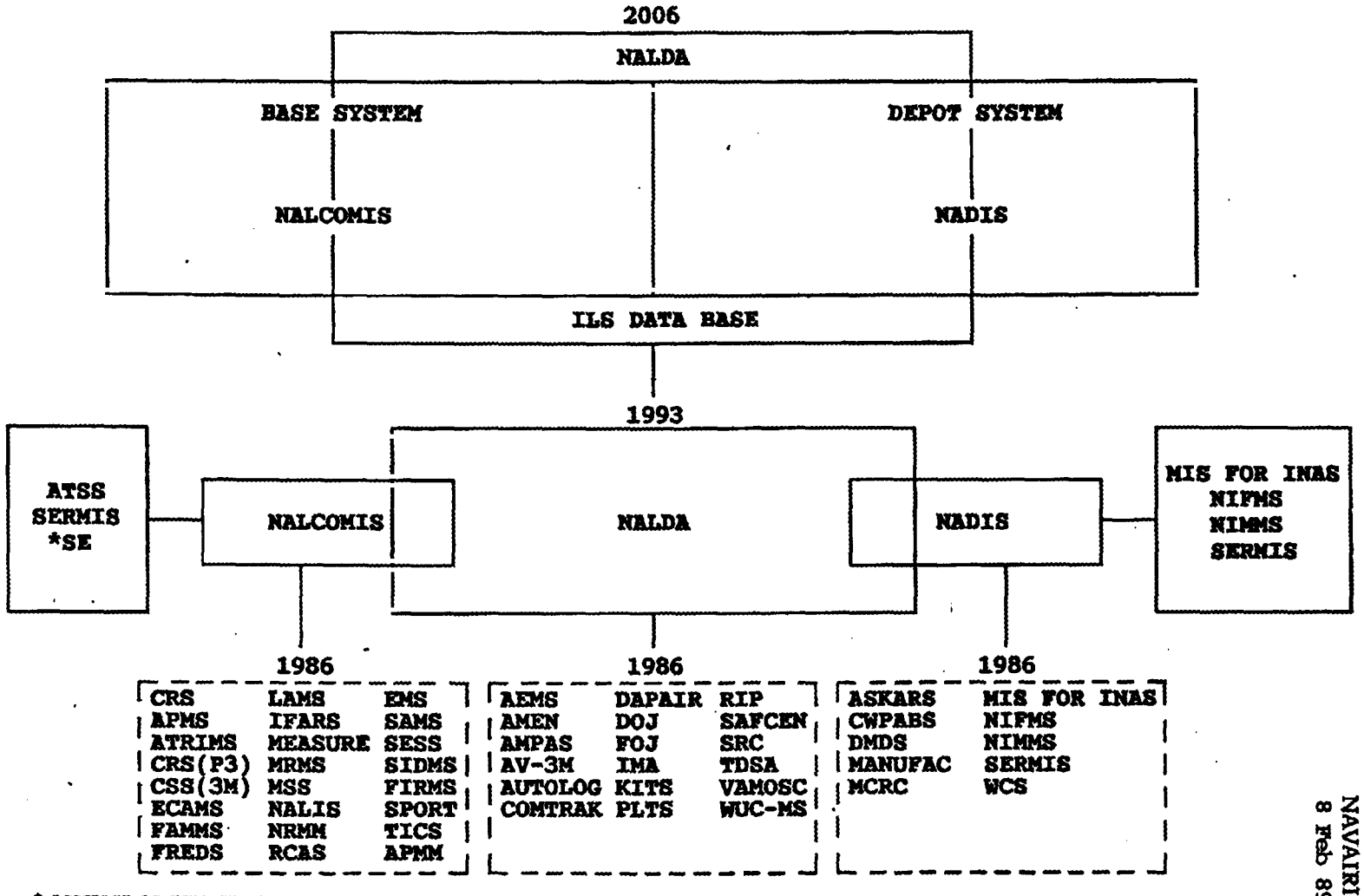
a. A draft IS architecture must be developed by the FM to reflect those systems that are known to require interfaces with NALCOMIS and those that potentially should be consolidated with/incorporated into it. This has been completed for the interim FSP period (through FY 1993) and the results are displayed in appendix B, page B-1.

b. The next step involves the detailed analysis by the FM of each IS's functions, data elements, reports, etc., to provide the basis for determining whether NALCOMIS, NALDA, or NADIS should provide automation support of each function, or if the requirement would be better satisfied via a separate IS that interfaces with one or more of the standard IS's. A cost/benefit analysis will be performed to aid in deciding whether or not the candidate IS should be incorporated into/absorbed by or interfaced with one of the standard systems.

c. The FM will provide the completed analysis package with recommendations to the NAMP policy committee for approval. The current systems that are envisioned for incorporation into/consolidation with NALCOMIS are displayed in appendix B. The final decision for consolidation will be made by the NAMP policy committee based on the economic analysis and recommendations submitted by the CCB. The data-gathering for the analyses of the candidate systems has begun and recommendations for consolidation should begin in FY 1989. Following NAMP policy committee functional approval and any necessary IS approvals, the CDA will be tasked by the PM, as required, to incorporate the new functions into NALCOMIS.

3.6 Hardware Support. As enhancements are identified for NALCOMIS, the CDA will provide estimates of any additional hardware resource requirements in conjunction with the software development estimates. The PM will submit consolidated Program Objectives Memorandum (POM) issues for each approved enhancement (see paragraph 5.1.2 of this manual) for software design, development and life cycle costs and the cost of additional hardware required to support the enhancement. Hardware for NALCOMIS will be purchased through the SNAP contract. Currently hardware configuration changes are coordinated with the SNAP JCCB, as appropriate.

3.7 Exceptions. The goal of NAVAIRHQ (AIR-411) is to keep exceptions to the current policy and guidance for aviation logistics IS's to a minimum. Therefore, fleet aviation logistics IS's that request approval to operate independently of NALCOMIS must thoroughly justify that position, show cost/readiness benefits over consolidation and have that approach approved by the NAMP policy committee, CNO (OP-51) and the IS approval chain (see figure 5).



* AIRCRAFT SE USED IN FIRMS & CASS WITH INTERFACE WITH NALCOMIS

FIGURE 1. NAVAL AVIATION LOGISTICS INFORMATION SYSTEM ARCHITECTURE

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CHAPTER 4

OVERVIEW OF THE FUNCTIONAL MANAGER ROLE

4.1 Definition. A FM is designated by the functional sponsor for each or a series of IS's. The FM coordinates IS project requests, ensures that functional/user requirements are met, ensures that all documentation is prepared, coordinates testing and implementation, and ensures CCB and NAMP policy established priorities are executed.

4.2 Scope

4.2.1 Functional Management. As the aviation logistics IS's FM, NAVAIRHQ (AIR-411) is the single point of contact for planning and providing fleet non-tactical ADP requirements, including data collection, reporting and analysis. AIR-411 also will certify/accept software prior to release to fleet/user activities.

4.2.2 Program Management. The PM for NALCOMIS is responsible for the design, development and fleet implementation of the NALCOMIS system. The PM is responsible for ensuring schedule, cost and performance objectives are planned, met or revised consistent with overall requirements imposed by higher authority regarding the implementation of all phases of both NALCOMIS software and hardware in the fleet. Close coordination is required between the PM and FM to ensure proper long range planning and execution of NALCOMIS enhancements.

4.2.3 ADP Security. ADP Security planning is accomplished by the PM and implemented by commanding officers of ADP sites.

4.3 Responsibilities. As the FM for aviation logistics IS's, NAVAIRHQ (AIR-411) is responsible for the following:

4.3.1 Coordination/Initiation of New IS's Requests, SCP's, and STR's. Any organization can submit a recommendation for a new IS or for a change to an existing IS. Requests for new systems should be submitted per appendix A, to NAVAIRHQ (AIR-411) via the appropriate chain of command. AIR-411 will process requests for new IS's per project control procedures addressed in reference (b). All SCP's and STR's for existing IS's should be submitted to the CDA as outlined in appendix A. Detailed information on SCP's and STR's is provided in paragraph 6.5.1 of this manual.

4.3.2 Preparation/Coordination of IS Approval and Design Documentation. IS approval is required for all new IS projects and for significant changes to existing systems. Following IS approval, a FD will be prepared by NAVAIRHQ (AIR-411) and reviewed by the Type Commanders (TYCOM's)/Aircraft Controlling Custodians (ACC's) prior to resourcing and tasking of the CDA.

4.3.3 Evaluation and Coordination of SCP's and STR's. All SCP's will be evaluated/scoped by the CDA/CRB. Class I changes (see paragraph 6.2.1.1 of this manual) will be presented to the CCB for concurrence before incorporation as described in paragraph 6.5.2 of this manual. Software trouble reports which exceed the CDA's ceiling limitation (20 man-days effort) as discussed in reference

(b) will also be presented to the CCB for concurrence before incorporation (see paragraph 6.2.1.3 for exception).

4.3.4 Establishment of Priorities. The FM will coordinate with the TYCOM's/ACC's to ensure that the fleet's priorities are supported in IS's development/implementation. The resource sponsor, CNO (OP-05), has final approval of all priorities before execution, as discussed in reference (g). The IS priorities and available resources will determine the projects that will be executed each year.

4.3.5 Conducting Periodic IS Design Reviews. As dictated by the individual project's milestones and progress, periodic design reviews and functional walk-throughs will be conducted by NAVAIRHQ (AIR-411) with fleet participation; these normally will be hosted by the CDA.

4.3.6 Software Release Certification. The FM will certify that new IS's and software releases are ready for implementation in the fleet and at user sites by conducting a System Performance Test (SPT). The FM will utilize certification teams, comprised of user representatives, to perform the SPT and will utilize test guidelines contained in reference (g).

4.3.7 Identifying/Coordinating Hardware Requirements. As software requirements are identified and planned for, the CDA will also determine the hardware impact on existing and/or planned IS's. The FM will then coordinate with the NALCOMIS PM to ensure that the necessary hardware will be available at fleet/user sites to support new/increased software capabilities.

4.3.8 IS Evaluation. The FM will evaluate existing/planned IS's for consolidation or interface with the approved major IS's. NAVAIRHQ (AIR-411), to the maximum extent possible, will facilitate the consolidation of aviation logistics IS's to get the most support for each ADP dollar. The IS architectures in appendix B provide the points of departure for evaluation of the various fleet aviation logistics IS's for consolidation or interface with the standard system, NALCOMIS. The ultimate goal is to consolidate aviation logistics IR requirements into the fewest number of IS's possible and to eliminate collection of any data element more than once.

4.3.9 Preparing Inputs to the Aviation IS Plans. The FM, with PM assistance, will prepare and coordinate inputs to the IR's planning process for the IS's and interfaces shown in appendix B. These plans will reflect all approved and projected aviation logistics IS requirements. Inputs are provided to CNO (OP-51) via NAVAIRHQ Information Systems Management Division (AIR-713) for consolidation and presentation to CNO (OP-945).

4.3.10 Fleet/User Interface. The FM will ensure fleet/user requirements are entered in the IS planning process. Primary interface and interaction with the fleet and other IS users will be accomplished through the NALCOMIS CCB. The CCB will meet at least semiannually for the first year after fleet implementation. Thereafter, the frequency of meetings may be adjusted based upon program requirements. The CCB, chaired by NAVAIR, will be comprised of representatives from each of the NAMP policy committee member commands (excluding OPNAV) and other applicable commands. The CCB will be the forum for discussing SCP's and recommending software priorities. Additional information on the CCB membership and scope of responsibilities is provided in chapter 6 of this manual.

CHAPTER 5

MAJOR FM RESPONSIBILITIES/PROCEDURES

5.1 Planning. The annual IS's planning evolution is described by reference (e). This planning process forms the basis for IS's approvals and budget/POM planning and execution.

5.1.1 IR Program Planning. IR plans are reviewed/approved by the Department of the Navy (DON) IR planning committee. The issues that these plans must address are the same: IS's standardization, IS security, wartime information requirements and consolidation of IS requirements.

5.1.1.1 An aviation logistics IS FSP is prepared annually by CNO (OP-515) and submitted to CNO (OP-945) (the DON IR Manager) in March with the FSP's from other functional sponsors. The FSP addresses the current IS situation, the projected situation at POM + 1 FY and the desired situation in 20 years. The aviation FSP includes an architecture (shown in figure 1) of all aviation IS requirements and the strategy for attaining this architecture.

5.1.1.2 More detailed plans expanding the aviation FSP are developed annually by NAVAIRHQ (AIR-411) and submitted to the functional sponsor in July. These plans define and document the baseline of known/anticipated IS requirements, establish objectives to satisfy the requirements and estimate the necessary resources.

5.1.1.3 Each IS interface, enhancement and consolidation effort will have a project plan prepared by the CDA which will provide a Plan of Action and Milestones (POA&M) for the design, development, implementation and life cycle support of the system. Project plans will identify all key milestones in the life cycle of the IS in addition to the associated resource requirements; these plans will be used as the basis for budget and progress reviews.

5.1.1.4 The DON IR planning committee meets in February and August of each year to review and approve FSP's and Component Information Management Plans (CIMP's) and to provide planning guidance to the functional sponsors/managers. (Note: CIMP's are prepared by responsible activities per reference (e).) The committee is chaired by CNO (OP-945), the DON IR Manager. Membership is comprised of representatives from CNO (OP-09B, OP-090, OP-093, OP-094, OP-095, OP-098, OP-008, OP-009, OP-01, OP-02, OP-03, OP-04, OP-05, and OP-06); Comptroller of the Navy (NAVCOMPT), Chief of Naval Reserve (CNR), Auditor General of the Navy (AUDGEN), Commander-in-Chief, Atlantic Fleet (CINCLANTFLT), Commander-in-Chief, Pacific Fleet (CINCPACFLT), Commander-in-Chief, U.S. Naval Forces, Europe (CINCUSNAVEUR), Commandant of the Marine Corps (CMC), Naval Data Automation Command (NAVDAC), NAVAIRHQ, Naval Sea Systems Command (NAVSEA), SPAWAR, Naval Supply Systems Command (NAVSUP) and Naval Facilities Engineering Command (NAVFAC).

5.1.2 POM Submissions. Yearly aviation logistics IS's POM submissions and associated documentation will be submitted by NAVAIR and the CDA as noted below.

5.1.2.1 POM submissions for new IS's and major modifications to existing IS's will be the responsibility of NAVAIR. In this way, the FM can directly support and defend POM submissions. Within the NALCOMIS Life Cycle Support budget, the program manager will continue to fund a NALCOMIS Software contractor directly for modifications. Reimbursable funding to the CDA will only be used for new start planning/design, quick-response and short-term projects and some changes outside the scope of the CDA's life cycle support budget.

5.1.2.2 The CDA will be responsible for submission of follow-on POM issues, via their chain of command, for life cycle maintenance. Copies of issue papers will be forwarded to NAVAIRHQ (AIR-411) for support and defense during the POM process. For POM issues directly impacting NALCOMIS, the CDA will include the PM on all submittals.

5.2 Setting Priorities. A responsibility of a FM is the establishment of priorities for software development, enhancements, changes and implementations. Overall priorities will be established through the CCB with fleet participation/input. Once the IS's priorities have been established and approved for the existing and planned projects, the CDA will be tasked within available resources to accomplish as many of the priority projects as possible.

5.3 Software Review/Certification. The FM is responsible for reviewing software development progress for design/functional compliance and certifying that major software releases are ready for fleet implementation per reference (g).

5.3.1 Functional/Design Reviews. The FM will review the functional requirements at the conclusion of the ADP design phase to ensure that the requested functions are being automated properly, and that the functions being automated are really those required. As the development process progresses, periodic design reviews of the software to verify functionality and desired operation will be conducted. Fleet representatives will participate in these reviews. Specific topics and agenda items will be developed as required for each system.

5.3.2 SPT. Following the completion of the development process and internal CDA quality assurance (QA) evolution, SPT is conducted consistent with reference (g). New software releases are implemented at a designated prototype site and operated for a specified time period (usually 30 days) with on-site CDA support as required. At that point, an evaluation team visits the CDA for release familiarization and review of system documentation, training materials and curricula, and implementation plans. The team then visits the prototype site to evaluate the software's performance and support. Based on the findings from these visits, the software is either certified for release to all sites as is, certified for release contingent upon modifications/corrections, or not certified for release at that time.

5.3.2.1 Team Composition. Representatives from CNO (OP-515), the ACC's, CMC, NAVAVNMAINTOFF, and other applicable activities will participate in the SPT as team members. The SPT teams are coordinated by NAVAIRHQ (AIR-411). The PM and CDA will participate in an advisory capacity only. Other activities such as CNO (OP-514), SPAWAR (PMW-164), etc., will be invited as observers. The team will develop a detailed test plan to accomplish the prototype SPT.

5.3.2.2 CDA Familiarization. The visit to the CDA facility provides an opportunity for team members to receive training on the software release operation, review the training materials/courses that will be provided to fleet personnel, review system documentation (FD, Requirements Document (RD), users manual, etc.), review implementation plans and schedules and ask questions. This also provides an opportunity to verify the functionality of the release as tasked by the FD.

5.3.2.3 Review of the Prototype. The SPT team visits the fleet prototype site after familiarization with the release and review of the documentation and training materials; this minimizes interruptions to the prototype activity's operations. At the prototype site, the team observes the efficiency of the software, determines the effectiveness of the training and CDA support through user interviews and validates the functions that have been automated.

5.3.2.4 Certification. After careful review of all the facts, the SPT team prepares a recommendation for implementation and forwards it to CNO (OP-51) for concurrence; CNO (OP-515) will disseminate the certification of the software for release to the fleet.

5.4 Life Cycle Management (LCM). LCM responsibilities are defined in reference (f). General guidance states that IS's must be effective, affordable, efficient, manageable and coordinated. The life cycle phases and approval thresholds for aviation logistics IS's are briefly discussed below. It is the FM's responsibility to ensure that all required LCM documentation is prepared/maintained and that all necessary approvals are obtained prior to the start of software development.

5.4.1 LCM Phases. Major IS's must pass through all five LCM phases and be supported by applicable documentation. This includes the approval documentation (MENS, SDP-I, SDP-II, SDP-III, SDP-IV) and the system documentation (FD, RD, system/program specifications, test plan(s), maintenance manual, user manual, training publications/material). The five LCM phases are:

5.4.1.1 Mission Analysis and Project Initiation Phase. Identify and validate a mission element need, determine significant assumptions and constraints, and recommend consideration of alternative concepts for an IS to satisfy the need. Approval of the MENS at Milestone-0 ends this phase. The MENS for all aviation logistics IS's with projected life cycle costs exceeding $1 million must be approved by the aviation logistics functional sponsor, CNO (OP-51).

5.4.1.2 Concept Development Phase. Develop and evaluate alternative ways to satisfy the MENS, perform initial economic analyses of alternative solutions and recommend one or more feasible concepts for further consideration. Approval of SDP-I at Milestone-I ends this phase.

5.4.1.3 Definition and Design Phase. Define and validate detailed functional requirements for IS performance, evaluate alternative designs for an operable IS to implement the recommended concept and recommend the best design for full-scale development. Approval of SDP-II at Milestone-II ends this phase. Active CDA participation begins with this phase.

5.4.1.4 System Development Phase. Develop, integrate, test and evaluate an operable IS to satisfy the design specifications and MENS, and update the

economic analysis as required. Approval of SDP-III at Milestone-III ends this phase and indicates that the system is ready to be implemented.

5.4.1.5 Deployment and Operation Phase. Deploy the IS, operate the system following specifications, maintain system economically, and evaluate system performance periodically throughout its life. The SDP-IV at Milestone-IV approval is an iterative decision continuing periodically throughout this phase, which ends when the IS is terminated or replaced.

5.4.2 Aviation IS's LCM Approval Thresholds. Approval thresholds for IS's change frequently, thus the information presented here should be verified as it is needed by consulting reference (f). Also, the approval thresholds for hardware, sole source procurements and punch card equipment differ from IS values and thus should be researched whenever such a purchase is contemplated.

5.4.2.1 NAVAIRHQ (AIR-713) approves IS projects of up to $10 million total life cycle cost. Abbreviated SDP (ASDP) approval documentation is required.

5.4.2.2 NAVDAC approves IS projects of up to $25 million total life cycle cost. Full SDP approval documentation is required.

5.4.2.3 CNO approves IS projects of up to $50 million total life cycle cost. Full SDP documentation is required.

5.4.2.4 Assistant Secretary of the Navy for Financial Management (ASSTSECNAV FM) approves IS projects of up to $100 million total life cycle cost. Full SDP documentation is required.

5.4.2.5 Office of the Secretary of Defense (OSD) approves IS projects greater than $100 million total life cycle cost or greater than $25 million cost per year. Full SDP documentation is required.

5.5 Resources

5.5.1 Planning. As new NALCOMIS tasking is identified for the CDA, it is the PM's responsibility to provide for the necessary resources. Resource and timeframe estimates are provided by the CDA (Life Cycle Maintenance funding is the responsibility of the CDA). As discussed in previous paragraphs, the POM process will be used to obtain necessary resources for new IS projects and major modifications to existing systems. Reimbursable funding will be provided to the CDA on a limited basis for minor tasks in support of the NAVAIRHQ (AIR-411) FM role, and to augment mission funding shortfalls. As much as possible, resource estimates will be prepared using structured prediction techniques and will be refined periodically.

5.5.2 Estimating. NAVMASSO, through application of estimating methodologies within its workload planning system, develops time and manpower estimates for application software design, development, implementation and life cycle support for proposed NALCOMIS applications software. These estimating methodologies operate upon data from analysis of the FD and from technical personnel responses to formatted queries regarding the proposed software's relative complexity.

5.6 ADP Research and Development. There is a continuous need to conduct evaluations of new techniques and capabilities, to conduct R&D projects to

identify better solutions to ADP problems and to provide innovative capabilities to system users. Aviation logistics IS's should always be on the leading edge of ADP technology to maximize the capabilities and capacities of systems to give the fleet the best support possible as it is needed. The FM will ensure new ADP technology is fully explored for aviation logistics applications.

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CHAPTER 6

CONFIGURATION MANAGEMENT

6.1 General. CM is a discipline which applies technical and administrative direction and monitoring to identify configuration and configuration items, control changes to their characteristics and combinations, determine through audits the official baselines, and record and report change processing and implementation status. Reference (i) is not directly applicable to non-tactical software. It has been the intent of this manual to follow the methodologies in reference (i). Detailed CM responsibilities and procedures are found in references (h) and (i). The following paragraphs contain a general discussion of these responsibilities and procedures.

6.2 Life Cycle CM. Life cycle CM of NALCOMIS includes two general functions: maintenance and modification. Maintenance includes such functions as replacing defective or obsolete hardware, correcting software defects, or incorporating minor software changes that do not affect the functionality or scope of the NALCOMIS project. Modification includes such functions as hardware redesign, major upgrades in hardware capability and adding enhancements (new functions) or other major changes to the application software.

6.2.1 Maintenance and Software Modification. Maintenance and modification actions on NALCOMIS software will be classified as either class I SCP's, class II SCP's, or STR's. Upon receipt, normally the CM administrator (assisted by the CRB) will ensure classification of all STR's and SCP's relating to application software into one of these categories using the following criteria (see note in paragraph 6.2.1.3 for exception):

6.2.1.1 Class I SCP. Changes that have major impact on the NALCOMIS. Such changes affect scope, functional capability of NALCOMIS and/or the interface with other systems. Changes in functional capability generally will impact the NAMP. Any change with an estimated cost exceeding 20 man-days effort will be classified as class I.

6.2.1.2 Class II SCP. Changes that have an estimated cost of no more than 20 man-days effort and do not affect the scope and/or functional capability of NALCOMIS or its interface with other systems. Class II SCP's do not impact the NAMP.

6.2.1.3 STR. Documentation of a NALCOMIS software program or processing error, output format or computational error or a system documentation error. Approved STR's result in program fixes and/or documentation updates. Normally any STR with an estimated cost exceeding 20 man-days effort will be processed by the same method as a class I SCP. (Note: Catastrophic system failures or failures which render inventory accuracy or repairables management functions unusable will not normally be processed by the CRB/CCB. They will be processed for action immediately.)

6.2.2 Hardware Modifications. Changes that affect NALCOMIS hardware configuration and/or the operating system software are processed as engineering change proposals (ECP's). A change originally submitted as a SCP may result in a need for an ECP. All ECP's will be referred to the SNAP I HCC by the NALCOMIS CCB with appropriate recommendations; the SNAP I JCCB is the approval authority for all NALCOMIS ECP's. For NALCOMIS unique ECP's, PMA270 heads the JCCB.

6.3 Functions and Responsibilities

6.3.1 NALCOMIS Configuration Manager. The configuration manager, as the chairperson of the CCB, has responsibility in all matters pertaining to the NALCOMIS CM program. Major responsibilities of the NALCOMIS configuration manager are:

a. Establish the NALCOMIS CM program.

b. Direct the CM program following the NALCOMIS Configuration Management Plan (CMP).

c. Ensure that configuration changes are made in compliance with all NAMP policy committee directions and decisions.

d. Designate a CM administrator to develop, implement and maintain the NALCOMIS CM program.

e. Approve and implement CMP revisions as required.

f. Appoint permanent and temporary working groups as necessary.

g. Execute the CCB established priorities and schedules for implementing change requirements.

h. Conduct CM and QA audits and reviews following approved plans.

i. Assign action items and ensure their timely and proper resolution.

6.3.2 CM Administrator. The CM administrator has the following responsibilities:

a. Implement the procedures for CM following the approved CMP.

b. Ensure that all changes are distributed for review, and are assigned a change number and a tentative CCB review date.

c. Prepare class 1 change proposals for presentation to the CCB.

d. Assist in the preparation of CCB required documentation.

e. Provide administrative support to the CCB chairperson.

f. Verify, record and report the status of approved changes.

g. Chair CRB and working group meetings and act as secretariat for all CCB, CRB and working group meetings.

h. Track all STR's and change proposals.

6.3.3 CCB. NAVAIRHQ (PMA270 and AIR-411) will co-chair the NALCOMIS CCB to maintain control of product baselines through the application of configuration control techniques to monitor and control changes to the system. The CCB will operate under the auspices of and report to the NAMP policy committee, and will provide interface and interaction with the fleet and other aviation IS's users. The CCB will process all class I SCP's and high cost STR's (see paragraph 6.5.2 of this manual).

6.3.4 NAMP Policy Committee Representation on the CCB. The CCB for NALCOMIS will include a representative with decision authority from each of the NAMP policy committee members (excluding OPNAV). This will ensure NALCOMIS change is controlled by NAMP policy.

6.3.5 Change Manager. The NAVAVNMAINTOFF is the change manager for all SCP's and STR's which impact the functional NAMP viewpoint. NAVMASSO is the change manager for all other SCP's and STR's. Change managers have the following responsibilities:

a. Coordinate SCP's and STR's with aviation technical and functional personnel as appropriate to develop and present a recommended position to the CCB.

b. Prepare and present change review packages to the CCB which contain pertinent background discussion covering necessary technical, logistics and financial issues.

6.3.6 CRB. NAVMASSO will chair the CRB. The CRB is comprised of senior technical/working level personnel from NAVMASSO and NAVAVNMAINTOFF, and is augmented with working group and other ad hoc members as required. The CRB will assist in classifying all CP's and TR's received by the CDA. Procedures for submitting SCP's and STR's are addressed in paragraph 6.5.1 and in appendix A of this manual. The CRB will review, evaluate and assess the impact of all STR's, class I SCP's and class II SCP's; and will serve as approval authority for all STR's/SCP's requiring no more than 20 man-days effort that do not impact the NAMP. NAVAVNMAINTOFF will serve as a permanent member of the CRB to ensure that all CP's are reviewed to determine NAMP and functional change impact. At least 1 month prior to the CCB, a package of all SCP's/STR's will be forwarded to each CCB member by the CRB.

6.3.7 CDA. NAVMASSO is the CDA for NALCOMIS and has the following responsibilities:

a. Serve as the single contact point for fleet TR's.

b. Provide analysis, design and original programming for new development.

c. Assist the configuration manager by conducting configuration audits and reviews.

d. Prepare installation and cost analyses of all configuration change items for inclusion in the change review packages.

e. Prepare appropriate software change review packages for presentation to the CCB and document fleet requirements and decisions of the NAMP policy committee.

f. Assist and support the configuration manager to ensure that information flow for proper CM is unhampered and timely.

g. Design, develop and incorporate approved SCRs.

6.4 CCB Membership. The CCB will attempt to obtain board consensus on all decisions. On any issue which consensus cannot be reached, the FM will resolve the decision. CCB composition is as follows:

Activity	Status
NAVAIRHQ (FM)	Cochair (Voting)
NAVAIRHQ (PM)	Cochair (Voting)
CNAL	Voting Member
CNAP	Voting Member
NAVAIRESFOR	Voting Member
CMC	Voting Member
NAVSUP	Voting Member
CNATRA	Voting Member
NAVMASSO	CM Administrator/CDA Change Manager (non-NAMP) Advisory
NAVAVNMAINTOFF	Change Manager (NAMP Related) Advisory
SPAWAR	Advisory
FMFLANT	Advisory
FMFPAC	Advisory
NAMSO	Advisory

6.5 Application Software CM Procedures. Both maintenance and modification of NALCOMIS software will be controlled by software CM procedures and by the use of STR's and SCP's. Detailed procedures are contained in reference (h) and are summarized in the following paragraphs.

6.5.1 How to Submit and Process STR's and SCP's

6.5.1.1 STR's. A STR is filed when a software error is found or when attendant documentation is incorrect/vague and procedures cannot be determined. Software errors which result in a program/process either not running to completion or producing erroneous output are reported via message or phone conversation from fleet users to the trouble desk at NAVMASSO. (See appendix A, page A-7, of this manual for letter format. If reporting by message or telephone, ensure same information is provided.) The following urgency indicators are established for use in submitting STR's in order to recognize their relative priority:

a. Critical (C). A reported problem that prevents successful completion of a function or process which in turn precludes normal maintenance and supply interactions and/or the generation of accurate AV-3M and supply system interfaces. Work-arounds for this problem are impractical or nonexistent. Fix must be completed and tested as soon as possible.

b. High (H). A reported problem that severely impacts the successful completion of a function or process. A work-around capability does exist, but is significantly time consuming for the user and increases the margin of error. Must not impact AV-3M and or supply system interfaces. Fix should be completed and tested in 3-7 days.

c. Medium (M). A reported problem that significantly impacts successful completion of a function or process; however, a simple work-around capability exists which does not significantly impact the user. Fix should be completed and tested prior to fleet implementation.

d. Low (L). A reported problem that has minor impact on the successful completion of normal functions and processes. Fix should be completed and tested as time and resources permit.

6.5.1.2 STR Processing. STR's are filed with the trouble desk at NAVMASSO (see figure 2) and processed per procedures addressed in reference (h). Each STR is analyzed to determine the amount and type of support required. The CRB acts as the approval authority for STR fixes. (Exception: STR's requiring resources estimated to exceed 20 man-days are processed in the same manner as class I SCP's.) A summary of approved STR's is presented to the CCB for information.

6.5.2 SCP's. SCP's are submitted via the appropriate chain of command to NAVMASSO. (See appendix A, page A-3 for letter format.) Each request will be screened and categorized by the CRB as a class I or class II SCP. A summary of approved SCP's is presented to the CCB for information.

6.5.2.1 Class II SCP Processing. Figure 3 displays the processing flow for class II SCP's. Class II SCP's will be processed by the CDA following procedures addressed in reference (h). Class II changes will be approved by the CRB and implemented by the CDA.

6.5.2.2 Class I SCP Processing. Figure 4 displays the processing flow for class I SCP's. All class I SCP's will be processed by the CDA per procedures addressed in reference (h). Changes will be approved by the CCB and implemented by the CDA, unless the change affects NALCOMIS functionality (functional enhancements), the NAMP manual, NALCOMIS hardware, or the interface with another IS. In these cases, the change must be processed through NAMP policy and/or IS approval authorities and/or the SNAP JCCB as applicable.

6.5.2.3 Functional Enhancement/Major Modifications (Figure 5)

a. Any activity can initiate recommendations and proposals for new NALCOMIS functional requirements. Such recommendations will be submitted to the FM by SCP letter format (See appendix A, page A-1 for letter format) and will provide a description of the general functional requirement being proposed, as well as justification for the recommendation. The FM will ensure all such recommendations are processed per CM procedures addressed in reference (i). Also, NAMP changes may result in requirements for new NALCOMIS functionality. NAVAVNMAINTOFF, as part of their NAMP change review process, will inform

the FM and CDA by letter of those NALCOMIS changes that affect NALCOMIS functionality and/or the NAMP.

b. After review of new functional enhancements, the CCB will recommend to CNO (OP-05) those proposed enhancements which should be developed, by priority. After CNO (OP-05) approval, and IS approval, if required, the FM will be responsible for developing required functional documentation (FD and RD) prior to the CDA beginning design and development of the SCP. The design/development will not proceed prior to receipt of required IS approval and resources from the functional sponsor.

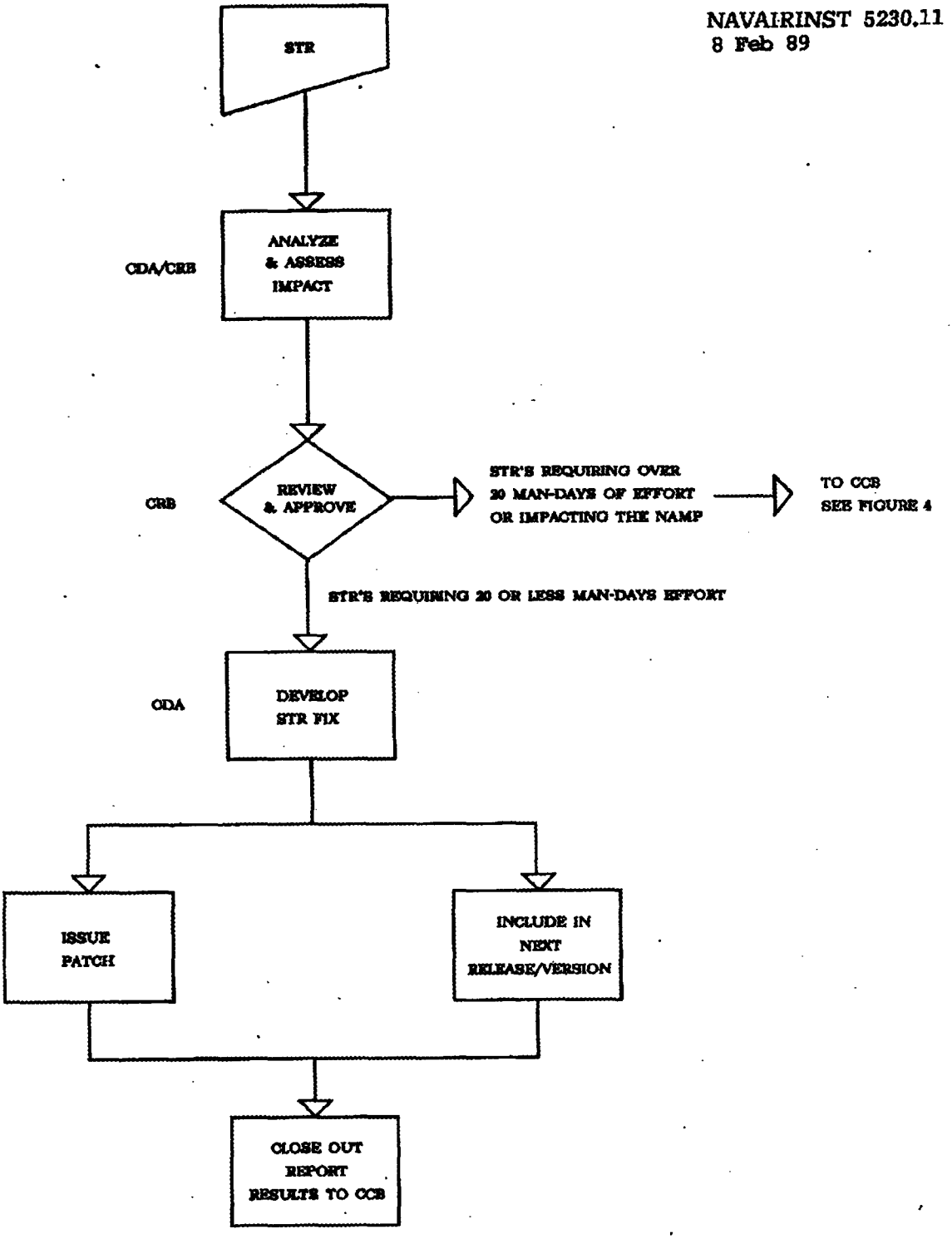

FIGURE 2. STR PROCESSING

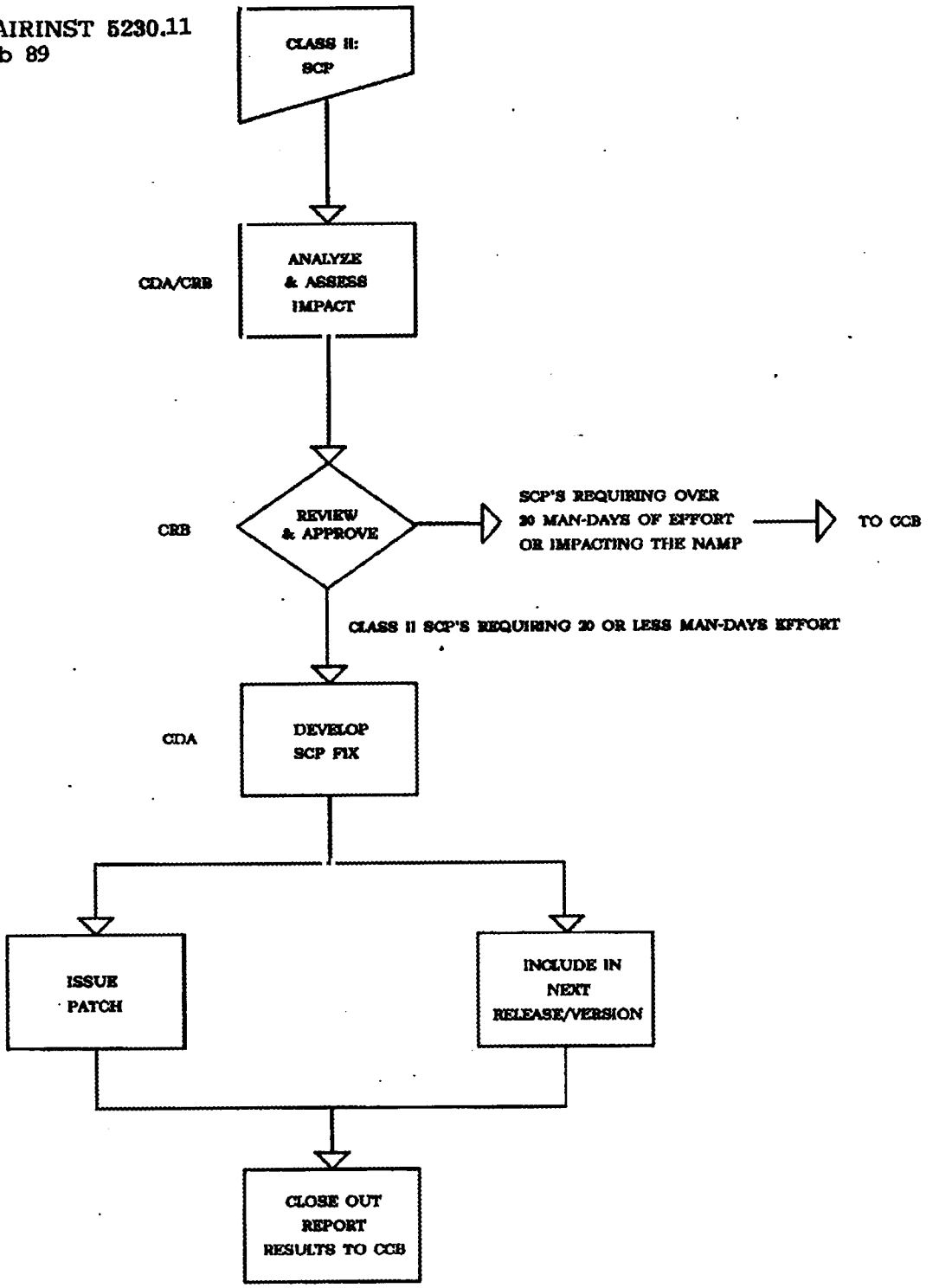

FIGURE 3. CLASS II SCP PROCESSING

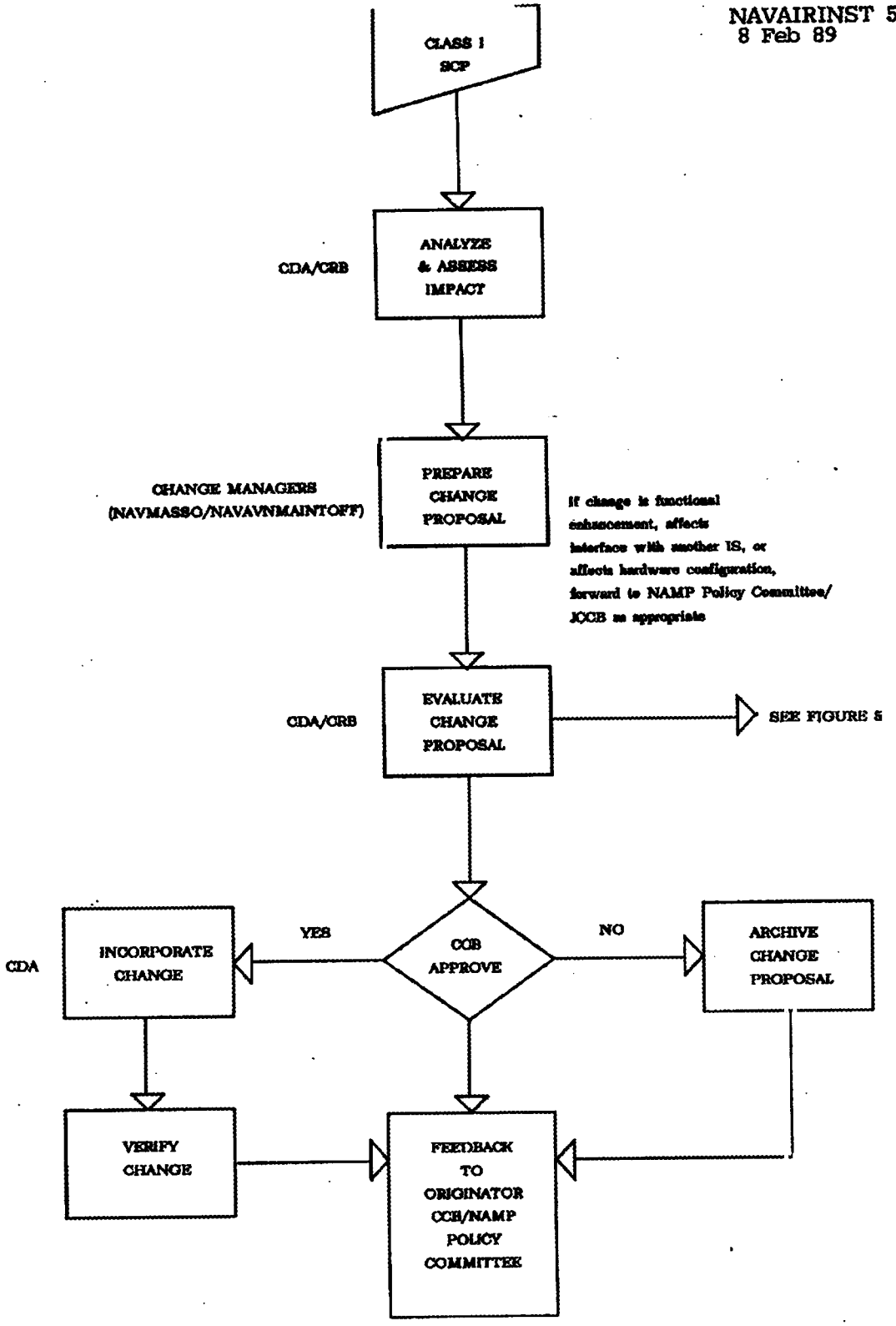

FIGURE 4. CLASS I SCP PROCESSING

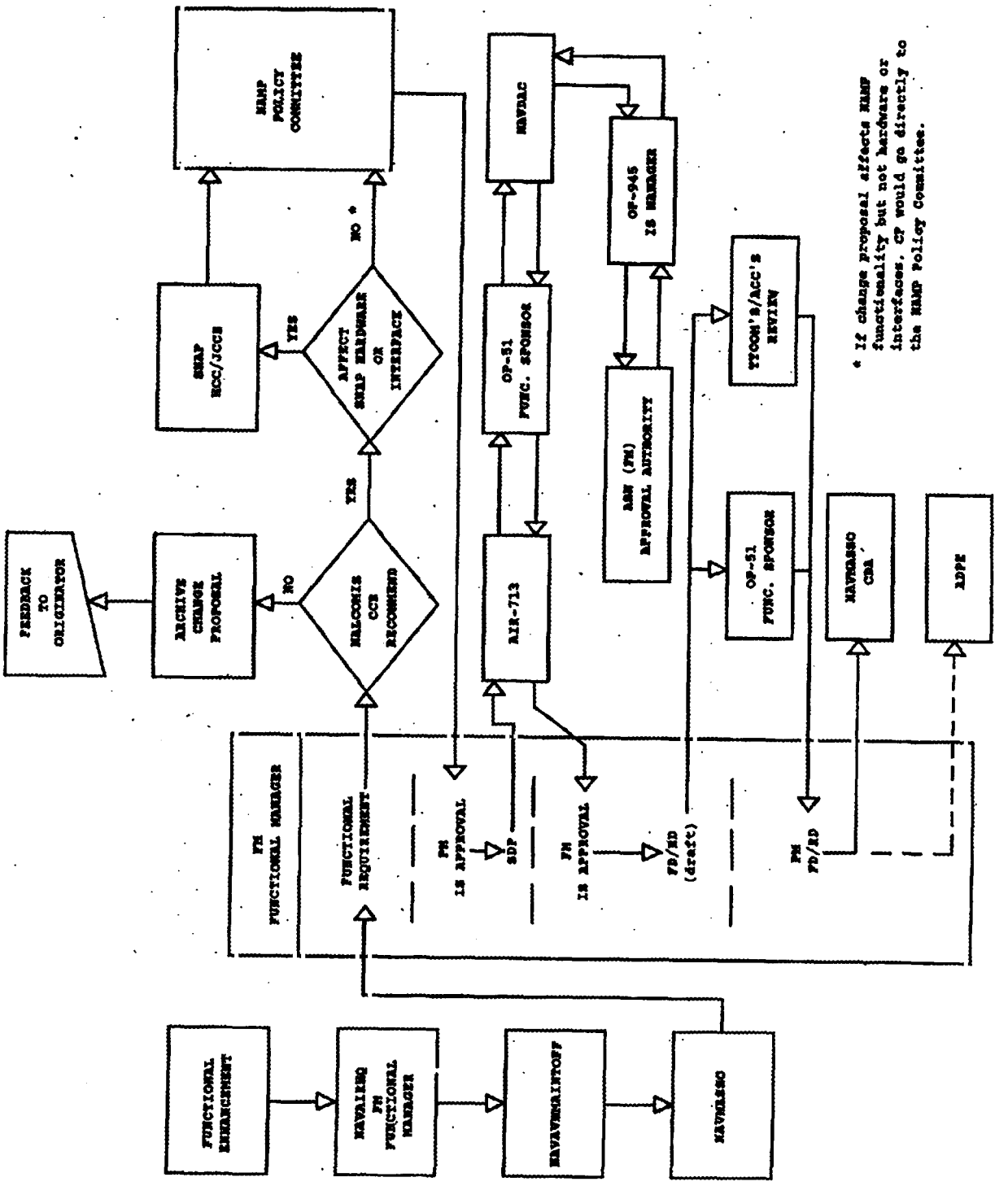

FIGURE 5. FUNCTIONAL ENHANCEMENT PROCESSING

APPENDIX A

NEW INFORMATION SYSTEM REQUEST,

SOFTWARE CHANGE PROPOSAL AND SOFTWARE TROUBLE REPORT

FORMATS

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SAMPLE: NEW INFORMATION SYSTEM REQUEST

From: (Originator)

To: Commander, Naval Air Systems Command (AIR-411)

Via: (Appropriate Chain of Command)

Subj: New Information System Request

Encl: (1) New Information System Request

1. Enclosure (1) is forwarded for consideration and appropriate action. Request feedback on decisions and milestones.

2. Point of contact is (name, organization code, phone number).

Copy to: NAVAVNMAINTOFF
SPAWAR (PMW-164)
NAVMASSO

NEW INFORMATION SYSTEM REQUEST

Title:

Need Statement:

Function(s) to be Automated:

Desired Implementation Date:

Potential Users/Sites:

Benefits Gained:

Detailed Description/Definition of System:

Additional Comments:

Supporting Documents Attached: yes/no

Point of Contact: (name, organization code, phone number)

SAMPLE: SOFTWARE CHANGE PROPOSAL

From: (Originator)

To: Commanding Officer, NAVMASSO

Via: (Appropriate Chain of Command)

Subj: Software Change Proposal

Encl: (1) Software Change Proposal

1. Enclosure (1) is forwarded for consideration and appropriate action. Request feedback on decisions and milestones.

2. Point of Contact is (name, organization code, phone number).

Copy to: NAVAVNMAINTOFF
NAVAIRHQ (AIR-4114)

NALCOMIS SOFTWARE CHANGE PROPOSAL PREPARATION

The NALCOMIS Software Change Proposal (SCP) format appears on page A-6. The instructions shown below apply to every user. All fields are mandatory except "Document affected" and "Status information".

Date: (8 positions) - The preparation date in month, day, year order.

Severity: (1 position) - C (Critical) H (High) M (Medium) L (Low) Circle one.

System: (1 position) - Circle either IMA/SSC or OMA.

OCN: (12 positions) - The Originator Control Number assigned by the NAVMASSO Configuration Manager after the form has been completed by the originator and certified as a valid SCP.

Title: (65 positions) - Briefly describe the problem.

Activity: (40 positions) - The name of the activity reporting the problem.

Originator/POC: (20 positions) - The name of the individual who is considered the Point of Contact (POC) at the activity reporting the problem.

Tel: (13 positions) - The complete telephone number of the originator.

UIC W/Problem: (5 positions) - The Unit Identification Code (UIC) of the activity that is experiencing the problem (the problem may not be at the reporting activity).

Class: (1 position) - Circle 1 if the change is of major impact to the system; 2 if there is no impact beyond the immediate point of the change.

Description: (640 positions) - A comprehensive description of the recommended change; one that will permit an understanding and evaluation of the SCP.

Impact if NOT approved: (122 positions) - Provide an assessment of system impact if the change is not adopted.

Subsystem affected: (1 position) - Place an "X" next to any subsystem known to be affected by the problem.

Conversations affected: (20 positions) - The number of any conversation affected by the problem. If unknown or all, enter an "X" in the appropriate position.

Screen/Reports affected: (40 positions) - The number of any screen or reports affected by the problem. Code "X" if unknown or all.

Interfaces affected: (1 position) - Place an "X" next to any known interface affected by the problem.

Documents affected: (200 positions) - The titles of documents related to, or affected by, the problem.

FD (Functional Description)

RD (Requirement Document)

UM (User's Manual)

OM (Operator's Manual)

COQRG (Computer Operator's Quick Reference Guide)

CONTG (Contingency Manual)

Status information: (1 position) - The status codes currently in use are shown below, along with the significance of each:

Code	Description
0	The SCP has been received and is under review by NAVMASSO (initial entry).
1	Undergoing analysis.
2	Approved (in work).
3	Awaiting Configuration Control Board (CCB) review.
4	Approved/Deferred.
5	In Quality Assurance.
6	CCB rejected.
7	Cancelled.
8	On hold (not yet approved).
9	Completed (will be released).
C	Closed (the change was declared functionally sound, assigned a number, and released to appropriate installations for their incorporation).

NALCOMIS SOFTWARE CHANGE PROPOSAL

(Type or Print)

Date	Severity (Circle one) C H M L	System (Circle one) IMA/SSC OMA	OCN (Assigned By NAVMASSO)

Title (Brief description of problem)

Activity	Originator/POC

TEL: ( )	Software Release Installed	UIC W/Problem	Class (Circle one) 1 2

Description:

Impact if NOT approved:

Subsystem Affected:

___ ALL ___ DB MAINT(0) ___ FLIGHT ACT(1) ___ MAINT ACT(2) ___ CONF STAT ACCT(3)
___ PERS MGMT(4) ___ ASSET MGMT(5) ___ MAT RQMT PROC(6) ___ LOCAL/UPLINE REP(7) ___ SYS SUPPORT(8)
___ DATA OFF/ONLOAD(9) ___ TECH PUB(A) ___ BATCH

* Conversations Affected (On-line and/or Batch)

___ UNK ___ All for subsystem _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
___ NONE

* Screens/Reports Affected

___ UNK ___ All for subsystem _____ _____ _____ _____ _____
___ NONE

* Interfaces Affected

___ AVIM ___ SUADPS(AV207) ___ SUADPS-RT ___ UADPS-SP ___ UADPS-LEV II ___ DOSS
___ NONE

* Documents Affected:

		Status Information			
_____ FD	OTHERS	Status Code	Date	Initials	Remarks
_____ ID	_____				
_____ UM	_____				
_____ OM	_____				
_____ COGRG	_____				
_____ CONTG	_____				

* Not mandatory

SAMPLE: SOFTWARE TROUBLE REPORT

From: (Originator)

To: Commanding Officer, NAVMASSO

Subj: Software Trouble Report

Encl: (1) Software Trouble Report

1. Enclosure (1) is forwarded for consideration and appropriate action. Request feedback on decisions and milestones.

2. Point of contact is (name, organization code, phone number).

NALCOMIS SOFTWARE TROUBLE REPORT PREPARATION

The Software Trouble Report (STR) format on page A-10 is similar to that used to initiate a Software Change Proposal (SCP) except there are no entries for "Class" and "Impact if NOT approved." All other fields are mandatory except "Documents affected" and "Status information."

Date: (8 positions) - The preparation date in month, day, year order.

Severity: (1 position) - C (Critical) H (High) M (Medium) L (Low) Circle one.

System: (1 position) - Circle either IMA/SSC or OMA.

OCN: (12 positions) - The Originator Control Number assigned by the NAVMASSO Configuration Manager after the form has been completed by the originator and certified as a valid STR.

Title: (65 positions) - Briefly describe the problem.

Activity: (40 positions) - The name of the activity reporting the problem.

Originator/POC: (20 positions) - The name of the individual who is considered the Point of Contact (POC) at the activity reporting the problem.

Tel: (13 positions) - The complete telephone number of the originator.

UIC W/Problem: (5 positions) - The Unit Identification Code (UIC) of the activity that is experiencing the problem (the problem may not be at the reporting activity).

Description: (762 positions) - A comprehensive description of the recommended change; one that will permit an understanding and evaluation of the STR.

Subsystem affected: (1 position) - Place an "X" next to any subsystem known to be affected by the problem.

Conversations affected: (20 positions) - The number of any conversation affected by the problem. If unknown or all, enter an "X" in the appropriate position.

Screen/Reports affected: (40 positions) - The number of any screen or reports affected by the problem. Code "X" if unknown or all.

Interfaces affected: (1 position) - Place an "X" next to any known interface affected by the problem.

Documents affected: (200 positions) - The titles of documents related to, or affected by, the problem.

FD (Functional Description)

RD (Requirement Document)

UM (User's Manual)

OM (Operator's Manual)

COQRG (Computer Operator's Quick Reference Guide)

CONTG (Contingency Manual)

Status information: (1 position) - The status codes currently in use are shown below, along with the significance of each:

Code	Description
0	The SCP has been received and is under review by NAVMASSO (initial entry).
1	Undergoing analysis.
2	Approved (in work).
3	Awaiting Configuration Control Board (CCB) review.
4	Approved/Deferred.
5	In Quality Assurance.
6	CCB rejected.
7	Cancelled.
8	On hold (not yet approved).
9	Completed (will be released).
C	Closed (the change was declared functionally sound, assigned a number, and released to appropriate installations for their incorporation).

NALCOMIS SOFTWARE TROUBLE REPORT
(Type or Print)

Date	Severity (Circle one) C H M L	System (Circle one) IMA/SSC OMA	OCN (Assigned By NAVMASSO)

Title (Brief description of problem)

Activity	Originator/POC

TEL: ( )	Software Release Installed	UIC W/Problem

Description:

Subsystem Affected:

___ ALL ___ DB MAINT(0) ___ FLIGHT ACT(1) ___ MAINT ACT(2) ___ CONF STAT ACCT(3)
___ PERS MGMT(4) ___ ASSET MGMT(5) ___ MAT RQMT PROC(6) ___ LOCAL/UPLINE REP(7) ___ SYS SUPPORT(8)
___ DATA OFF/ONLOAD(9) ___ TECH PUB(A) ___ BATCH

* Conversations Affected (On-line and/or Batch)

___ UNK ___ All for subsystem _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
___ NONE

* Screens/Reports Affected

___ UNK ___ All for subsystem _____ _____ _____ _____ _____
___ NONE

* Interfaces Affected

___ AVIM ___ SUADPS(AV207) ___ SUADPS-RT ___ UADPS-SP ___ UADPS-LEV II ___ DOSS
___ NONE

* Documents Affected:

		Status Information			
		Status Code	Date	Initials	Remarks
_____ FD	OTHERS				
_____ RD	_____				
_____ UM	_____				
_____ OM	_____				
_____ COQRG	_____				
_____ CONTG	_____				

* Not mandatory

APPENDIX B

AVIATION LOGISTICS INFORMATION

SYSTEM ARCHITECTURES

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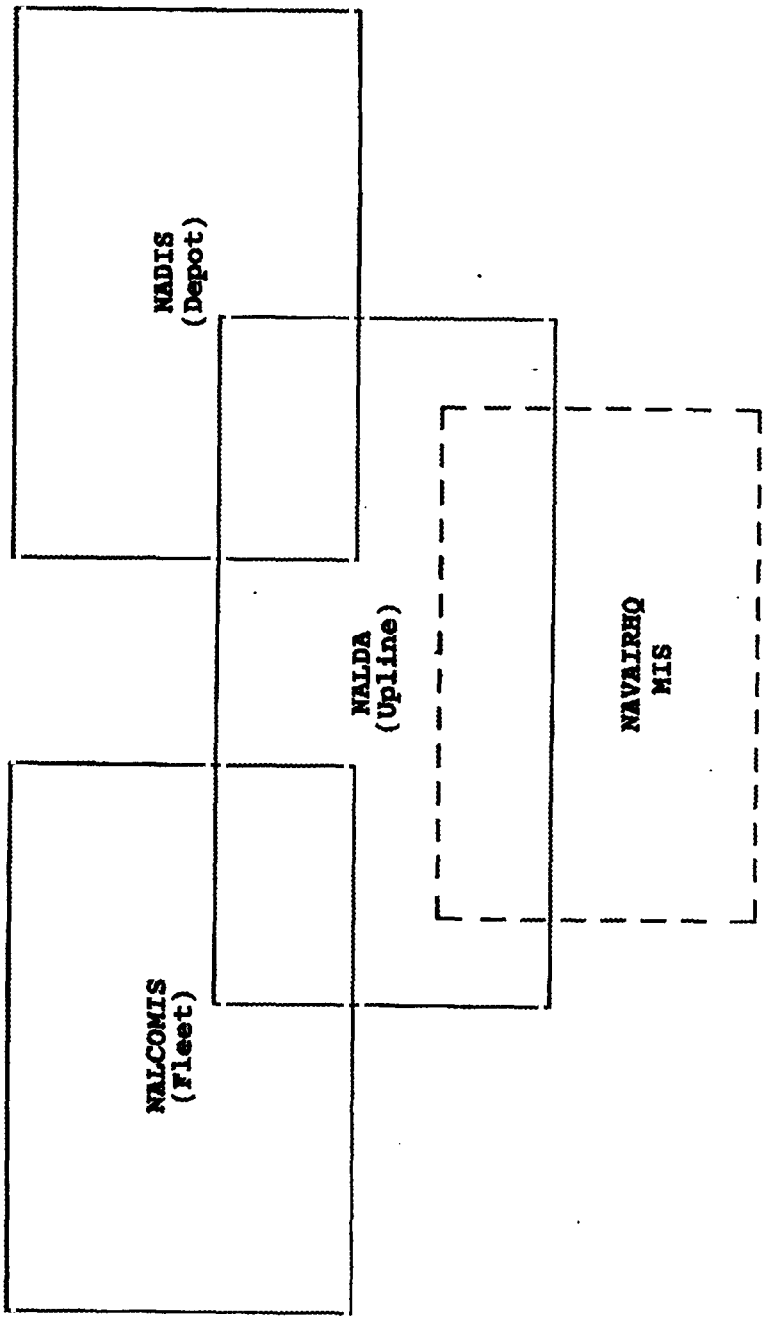
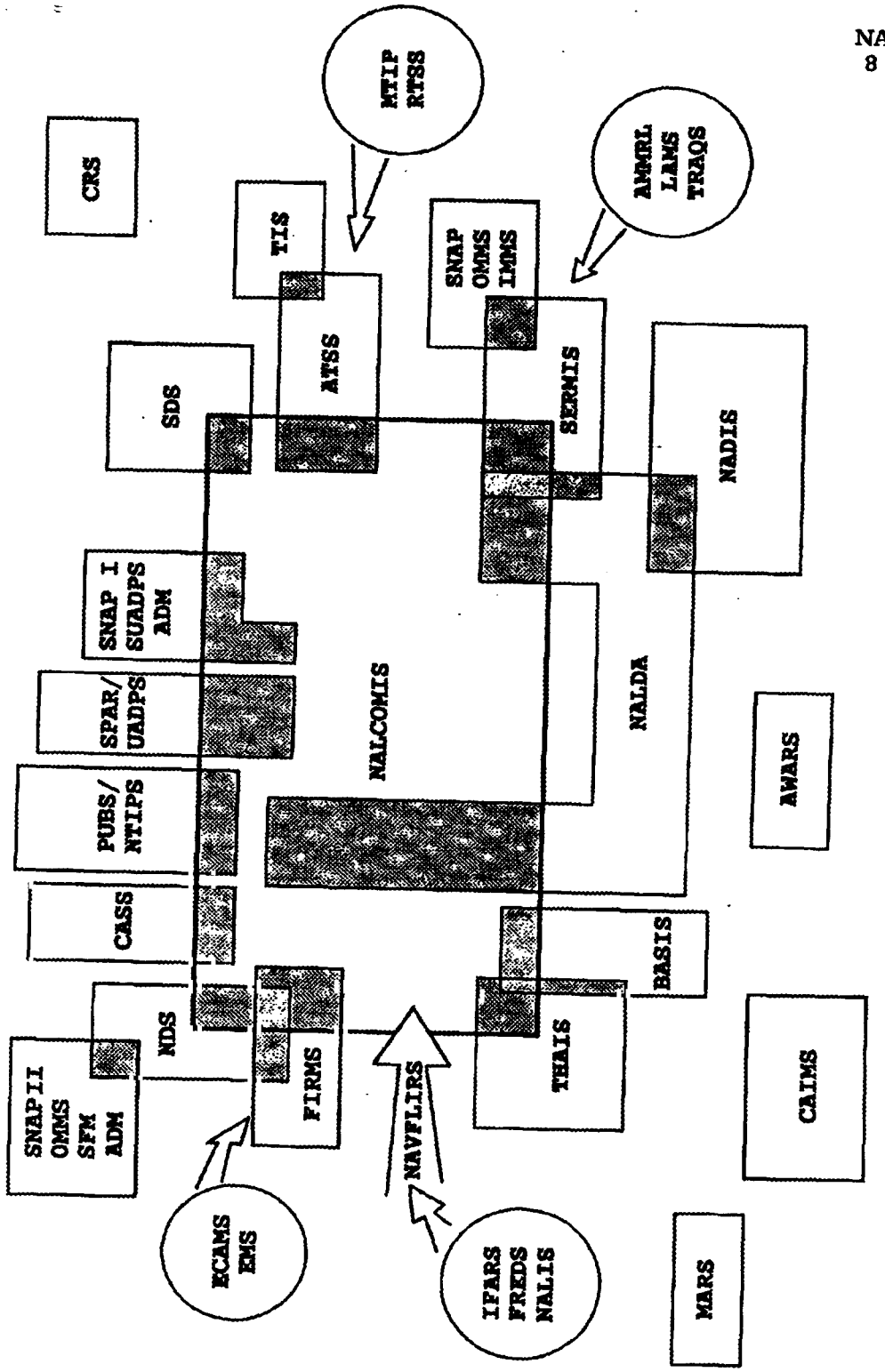


LONG-RANGE ARCHITECTURE:
THE AVIATION LOGISTICS INFORMATION SYSTEMS PLAN

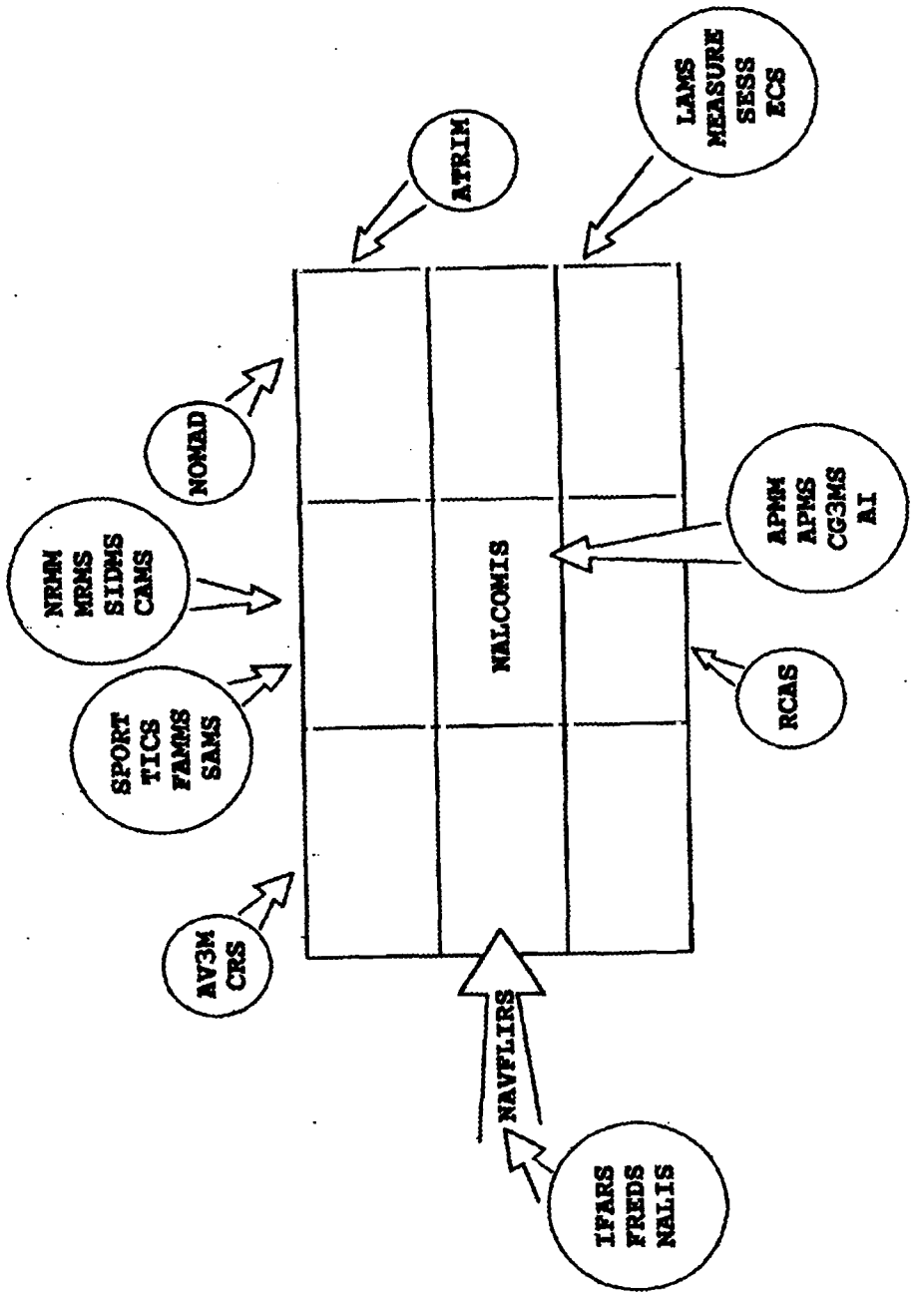
MAINTENANCE ACTIVITY	MATERIAL PROCESSING	ADMIN & PERS MGMT & TRAINING
FLIGHT ACTIVITY	* MGMT, ANALYSIS TOOLS	TECHNICAL PUBLICATIONS
LOCAL/ UPLINE REPORTING	CONFIG STATUS ACCOUNTING	ASSET MANAGEMENT

*NOT BASELINE FUNCTIONAL MODULE

NALCOMIS MAJOR FUNCTIONAL MODULES



CANDIDATE NALCOMIS INFORMATION SYSTEMS INTERFACES



CANDIDATE INFORMATION SYSTEMS CONSOLIDATIONS - NALCOMIS

APPENDIX C

DEFINITIONS

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DEFINITIONS OF TERMS

Architecture -	See IS Architecture.
Baseline -	A configuration identification document or a set of such documents formally designated and fixed at a specific time during a configuration item's life cycle. (A baseline is the point of departure for control of future changes.)
Central Design Activity (CDA) -	Responsible for the design, development, implementation and life cycle support of an IS. A CDA is responsible for identifying new ADP requirements and analyzing, designing, programming implementing, maintaining and providing life cycle support for assigned automated IS's. NAVMASSO is the CDA for all fleet non-tactical IS's, afloat and ashore.
Change -	A modification to an existing system which is initiated as a new requirement.
Change Manager -	Assists the configuration manager by coordinating functional review of SCP's.
Change Proposal (CP) -	Any proposed/directed modification to existing hardware/software systems necessary to satisfy user needs or implement mandated changes from higher authority. There are two categories of CP's: SCP's, which affect only application software and ECP's, which affect hardware/operating system software.
Change Review Board (CRB) -	The board is comprised of senior technical and working level personnel from NAVMASSO and NAVAVNMAINTOFF which compiles, reviews, determines impact and cost for all CP's and TR's. Usually has the authority to approve CP's and TR's that do not impact the NAMP and can be accomplished within 20 man-days effort.
Configuration -	The functional and/or physical characteristics of hardware/software as in technical documentation and achieved in a product.
Configuration Control Board (CRB) -	An appointed board with authority to permit or reject proposed hardware/software configuration changes. Usually has the authority to commit funds and impose changes which affect all levels of the system life cycle program.
Configuration Item -	An aggregation of hardware/software, or any of its discrete portions which satisfies an end use function

and is designated by the Government for configuration management.

Configuration Management Administrator (CMA) - Administrator of the CMP as directed by the configuration manager. Also performs secretariat duties for CCB.

Design - Preparation of the FD, RD, program specifications, etc. Formulation of the IS's functions to be performed, the way they will operate, and how they will be programmed.

Development - ADP design preparation, programming, testing, manuals/documentation preparation, etc. This is usually the longest and most involved phase of delivering an IS. Also may refer to the resources applied to accomplish this phase of a project.

Functional Description (FD) - A document developed during the definition of a project that describes the system requirements to be satisfied; provides information on design, performance requirements, user impacts and costs; and forms the basis for developing system tests.

Functional Enhancement - Defines a new functional requirement and/or interface capability not currently resident within the existing system.

Functional Manager (FM) - Designated by the functional sponsor. Responsible for coordinating project requests, preparation of FD's and RD's, ensuring required resources are available, coordinating testing and implementations, providing milestone dates and monitoring progress, keeping functional sponsors informed, and establishing overall IS priorities.

Functional Requirement - Those functions targeted for automation as defined by the current approved FD.

Functional Sponsor - Responsible for ensuring that functional, ADP, and telecommunications plans are developed and maintained; obtaining funding certification; and appointing a FM for each AIS under their cognizance.

Implementation - Deployment of an applications software program and the initial user on-site training support.

IS Architecture - A statement of information requirements, flows, and systems interfaces showing how individual systems fit together to form a comprehensive whole. Architectures are developed to show: (1) the current or baseline situation; (2) the planned or intermediate

	situation when all currently programmed actions are implemented; and (3) the target situation or ultimate desired IS structure. IS architecture studies assist in the definition of planning objectives.
Information Resources (IR) -	Information itself and all resources related to its management; including personnel, equipment, funds and technology.
Information System (IS) -	People, equipment and facilities operating together in accordance with established procedures to collect, refine, combine, store, communicate and/or retrieve information.
Maintenance -	The required fixing of program deficiencies and problems as identified by users through the trouble reporting procedures. Required to keep existing software programs operational.
Operational Baseline -	Approved system documentation required to operate and maintain the system effectively. (Represents a deployable product).
Patch -	Modification of a module within a software program (not a release - only applies to software already implemented and in use.) This is a fix to a problem, usually as a result of a critical STR.
Program Manager (PM) -	Generally designated by the functional manager for a specific IS project. Responsible for managing the design, development and fleet implementation of and IS project.
Program Specifications (PS) -	Expands on data provided in the FD and system/subsystem specifications for any automated data system development. Provides details from which software programs are written; are usually prepared as the initial step of software development.
Prototype (Software) -	A new software release implemented at a designated site in the proposed fleet environment for purposes of evaluation. After a period of operation (usually 30 days) with CDA support as required, an evaluation team evaluates the software's performance and support. If found satisfactory, the prototype is certified for release to all sites.
Quality Assurance (QA) Testing -	A planned systematic pattern of all actions necessary to provide adequate confidence that the product will perform satisfactorily in service. The CDA, supported by the FM, performs testing in accordance with the test plans, and prepares appropriate test analysis reports.

Release -	A configuration management action where by a particular version of software is made available for a specific purpose (e.g. released for test).
Requirements Document (RD) -	Developed during the design phase. Provides a list and definitions of data elements which the system must handle and communicates the data collection requirements to the user.
Software Change Proposal (SCP) -	Those CP's which impact NALCOMIS application software.
SNAP I -	Acquisition program managed by SPAWAR for the AN/UYK-65 non-tactical computer system used by NALCOMIS.
Software Trouble Report (STR) -	Documentation of a program or process error, output format or computation error, or system documentation error that was identified by an IS's users. These result in a program fix/change or documentation update (maintenance).
System Decision Paper (SDP) -	Formal documentation which outlines the scope of an IS program and is utilized to achieve ADP approvals.
Systems Performance Test (SPT) -	An impartial review of prototype software conducted by the FM fleet/user personnel before releasing the system to the fleet.
System/Subsystem Specification -	The specifications of the overall system or individual subsystems within the system. Provide more detail than the FD.
Version -	An identified and documented body of software. Modifications to a version of software (resulting in a new version) require configuration management actions by either the contractor, contracting agency, or both.